

**IN THE CLAIMS:**

Please amend the claims, as follows:

Claim 1 (currently amended): The heating value meter (1) for gases, consisting of comprising an outer mantle (10) with thermostatically controlled heating and with at least one air inlet (103) for introduction of air and at least one gas inlet (105) for introduction of [[the]] test gas or for introduction of calibration gas, and a measuring block (11) placed inside the outer mantle (10), characterized in, that outer mantle (10) is cylindrical, it is equipped with a heating mantle (101) on its outer surface (~~101~~) and its bottom part contains an outer sensor (102) of an first electrical remote ~~long-distance~~ thermometer of the outer thermostatic apparatus (2) placed axially in the wall, and a measuring block (11) is also cylindrical with an axial through-hole (113), it is located coaxially inside the outer mantle (10) and its upper part is equipped with an outlet (104) and an axially inserted internal sensor (112) of [[an]] a second electrical remote ~~long-distance~~ thermometer of the internal thermostatic apparatus (3), while the heating mantle (101) and the outer sensor (102), and also the electrical heating block (111) and the internal sensor (112), are interconnected via the outer and internal thermostatic apparatus (2, 3), adjusted for maintaining of a constant temperature value by regulation of [[the]]an electrical input to the electrical heating block (111), or of the electrical input to the heating mantle (101), ~~where, in addition~~ wherein the measuring apparatus (31) of the electrical input of the heating block (111) is connected to [[the]] an electric lead [[to]]of the electrical heating block (111).

Claim 2 (currently amended): The heating value meter (1) for gases, according to claim 1, characterized in, that the outer mantle (10) and the measuring block (11) are made from a metallic material.

Claim 3 (currently amended): The heating value meter (1) for gases, according to claim 1, characterized in, that the outer mantle (10) and the measuring block (11) are made from an alloy based on copper or aluminium.

Claim 4 (currently amended): The heating value meter (1) for gases, according to claim 1, characterized in, that a gap exists between the outer surface of the measuring block (11) and the internal surface of the outer mantle (10), wherein a width of the gap equals to 0.3 to 3.0 ~~[[fold]]~~ multiple of the outer diameter of the measuring block (11).

Claim 5 (currently amended): The heating value meter (1) for gases, according to claim 1, characterized in, that the overall cross-section area of the ~~outlets~~ outlet (104) for the flue gases equals to 1.1 to 2.0 ~~[[fold]]~~ multiple of the overall cross-section area of the air inlet or inlets (103).

Claim 6 (currently amended): The heating value meter (1) for gases, according to claim 1, characterized in, that there are at least two air inlets (103) in the outer mantle (10) and that they are bored at an angle or are diverging from the longitudinal axis of the measuring block (11).

Claim 7 (currently amended): The heating value meter (1) for gases, according to claim 1, characterized in, that the electrical heating block (111) and/or the internal sensor (112) are placed in the measuring block (11) closer to its circumference than to its axial through-hole (113).

Claim 8 (currently amended): The heating value meter (1) for gases, according to claim 1, characterized in, that a cavity (114) is formed between the position of the electrical heating block (111) and/or the internal sensor (112), and the axial through-hole (113), and/or a shielding body (115) made of a thermally insulating matter is placed in the cavity position.

Claim 9 (currently amended): The heating value meter (1) for gases, according to claim 1, characterized in, that the internal thermostatic apparatus (3) is adapted for regulation of the electrical input to the electrical heating block (111), within a range from 5 to 50% of ~~[[the]]~~ heating input capacity of the calibration gas combusted in the meter (1).

Claim 10 (currently amended): The method of operation of the heating value meter (1) constructed according to claim 1, comprising: ~~characterized in, that first the calibration stage takes place~~

performing a calibration operation involving introduction and combustion of a calibration gas with a precisely known heat of combustion in the meter (1); ~~followed by measuring the~~

obtaining a temperature value reading at the internal sensor (112) and storing it

~~in the the temperature reading in a memory of the measuring apparatus; and, followed by the~~

~~-stage consisting of introduction and combustion~~ introducing and combusting of the test gas in the meter (1), ~~with simultaneous measurement and simultaneously measuring~~, by means of the measuring apparatus (31), ~~[[of]]~~ the electrical input to the electrical heating block (111) and maintaining, by means of the internal thermostatic apparatus (3), the temperature of the measuring block (11) measured at the internal sensor (112), at the same value as that determined and stored in the memory during the calibration step stage, and

wherein the value of the heat of combustion of the test gas is determined from the difference between the heat of combustion value of the calibration gas and the value of ~~[[the]]~~ heating input capacity of the electrical heating block (111), while keeping the outer mantle (10) temperature ~~at the same and constant value~~ during the calibration and measuring steps stages.

Claim 11 (currently amended): The method of operation, according to claim 10, characterized in, that the calibration stage is repeated every 30 to 300 minutes ~~during the measuring process.~~